

UNITED STATES DISTRICT COURT
DISTRICT OF NEW HAMPSHIRE

Industrial Communications
and Electronics, Inc. et al.

v.

Civil No. 07-cv-082-JL
Opinion No. 2012 DNH 168

Town of Alton,
David Slade, and Marilyn Slade

FINDINGS OF FACT, RULINGS OF LAW, AND ORDER FOR JUDGMENT

This is a challenge to the Town of Alton's decision, in December 2006, to deny the plaintiffs the variance necessary to construct a 120-foot cell tower there. The plaintiffs, who are Industrial Communications and Electronics, Inc. ("ICE"), RCC Atlantic, Inc., d/b/a UniceL ("UniceL") and U.S.C.O.C. of New Hampshire RSA #2, Inc., d/b/a U.S. Cellular ("U.S. Cellular"), claim that this decision effectively prohibits the provision of personal wireless services in violation of § 704(a) of the Telecommunications Act of 1996 (the "TCA"), 47 U.S.C. § 332(c)(7)(B)(i)(II). This court has subject-matter jurisdiction under 28 U.S.C. § 1331 (federal question).

The plaintiffs commenced this action in March 2007. About four months later, David and Marilyn Slade, who own property abutting the site of the proposed tower, were granted leave to intervene in the case. See Fed. R. Civ. P. 24. While the Slades' motion to intervene asserted that their "claims/defenses

share commonality with the main action," they never filed a complaint, answer, or other pleading setting forth any claims or defenses, even though they were represented by counsel at all times. In fact, they filed nothing of substance in the case until late August 2009, when they purported to "oppose the tentative settlement" between the plaintiffs and the Town which, at that point, had been recently reported to the court. Nor, so far as the record indicates, did the Slades engage in discovery, designate experts, or otherwise participate in the litigation.

Eventually, in March 2010, the plaintiffs and the Town filed an agreement for judgment embodying a settlement of the plaintiffs' claims, under which, inter alia, a variance would be allowed for a tower 100 feet, as opposed to 120 feet, high. The Slades objected to the entry of judgment, arguing that, despite the settlement between the plaintiffs and the Town, the Slades "retain[ed] the right to press their claims that the proposed telecommunications tower violates local zoning ordinances and that the ZBA's decision does not contravene the" TCA. In rejecting this argument, the court ruled that, among other things, the Slades had never previously made any such claims (again, they had never filed any pleading) and "[t]his unexplained delay is reason enough to conclude that the Slades cannot now start pursuing a claim that Alton's decision to

disallow the proposed tower complied with the TCA.” [Indus. Commc’ns & Elecs. v. Town of Alton](#), 710 F. Supp. 2d 189, 193 (D.N.H. 2010). So the court approved the agreement for judgment, with one modification, and directed the Clerk to close the case.

The Slades, however, appealed this decision to the court of appeals, which vacated the judgment and remanded for further proceedings. [Indus. Commc’ns & Elecs., Inc. v. Town of Alton](#), 646 F.3d 76 (1st Cir. 2011). The court of appeals ruled that “the Slades are entitled to resist the entry of a decree that terminates their protectable rights unless a violation of the [TCA] is proven,” observing that this court “ha[d] not yet so found” because “it deemed itself no longer entitled to decide that question because the original defendant,” i.e., the Town, “no longer chooses to defend the [denial of the] variance.” [Id.](#) at 80. “But the Slades are prepared to do so,” the court of appeals observed. [Id.](#) The court of appeals did not address this court’s ruling that, because the Slades had not announced that they were “prepared to do so”—or taken any action in the case at all—until nearly three years after they had intervened, they had waived any argument that the Town’s denial of the variance did not violate the TCA. See [Indus. Commc’ns & Elecs.](#), 2010 DNH 081, 4-6 (discussing [Local No. 93, Int’l Ass’n of Firefighters v. City of Cleveland](#), 478 U.S. 501, 528-29 (1986)).

In any event, following remand, the court conducted a bench trial on the plaintiffs' claim over the course of three days in November 2011. Before trial, the plaintiffs and the Slades each submitted a trial memorandum and a set of proposed findings and rulings, see L.R. 16.2(b)(2), and jointly filed a timeline and statement of agreed-upon facts as directed by the court, see [Order](#) of Sept. 28, 2011. The parties agreed to submit the direct testimony of their witnesses by affidavit, and to produce the affiants for cross-examination at trial.¹ Id. They further agreed that the records of the proceedings before Town authorities on the plaintiffs' applications for the variance and related relief, which were on file with the court--and spanned nearly 2,300 pages--would be part of the record at trial.² Id.

¹The one exception to this approach was Mark Hutchins, an independent radio frequency engineer the Town had hired to evaluate the plaintiffs' application, who was unable to appear at trial due to illness. By agreement, the parties took his deposition during a recess in the trial, and submitted the transcript as part of the trial record.

²The Town did not submit any final pretrial materials, nor did it appear at the trial. As a result, the plaintiffs moved at trial for entry of a default judgment against the Town. See [Fed. R. Civ. P. 55\(b\)](#). That motion is granted. The plaintiffs also moved at trial to default the Slades for failing to file an answer or other responsive pleading. While that would seem to be an inescapable result under the Federal Rules of Civil Procedure, it cannot be squared with the decision by the court of appeals in this case, as just discussed, so the plaintiffs' motion to default the Slades is denied.

Based on these materials, the court makes the following findings of fact and rulings of law, see Fed. R. Civ. P. 52(a), which result in the entry of judgment for the plaintiffs on their claim that the Town's denial of their application for a variance amounts to an effective prohibition on the provision of wireless services in violation of the TCA. The plaintiffs have shown, by a preponderance of the evidence, that both Unice! and U.S. Cellular have significant coverage gaps in the area and that, despite their thorough investigation of viable alternatives, the proposed tower is the only feasible way to close those gaps. By and large, the Slades have failed to come forward with any evidence contesting the existence of the gaps or the feasibility of any alternative plan, arguing instead that (1) the fact that an entity controlled by another wireless carrier, Verizon, acquired Unice! in August 2008 (several months after the permitting decision at issue here) means that Unice! cannot show a coverage gap without accounting for Verizon's coverage in the area, and (2) the plaintiffs' failures to investigate constructing two new towers, as well as a third set of new antennas on an existing tower, as an alternative to the single tower they proposed, and to propose a tower lower than 120 feet, are fatal to their effective prohibition claim.

As more fully explained below, the court rejects these arguments. First, they rely largely on proffered expert opinion testimony that the Slades did not disclose until the week before trial and, as a result, is inadmissible. Second, the mere fact that Verizon acquired control of Unice1, even if Verizon did so in order to get control of Unice1's network, does not mean that the two networks should be treated as one for purposes of the substantial gap analysis, and the Slades adduced no other admissible evidence on this point. Third, there is no credible evidence (properly disclosed or otherwise) that the proposed three-tower solution would fill the coverage gaps, and the significantly greater visual impacts and financial costs of such a solution mean that it was never a feasible alternative in any event--and readily explain the plaintiffs' claimed "failure" to investigate such a plan. Fourth, and finally, the evidence overwhelmingly shows that lowering the tower height is also not a feasible alternative such that the plaintiffs' "failure" to offer that to the Town during its review of their variance applications would defeat their effective prohibition claim.

Findings of Fact

Unice1 and U.S. Cellular coverage gaps in Alton

1. In 2004, plaintiffs Unice1 and U.S. Cellular, holding federal licenses to provide personal wireless services in areas

including the Town, determined that they had gaps in their wireless networks there. In Belknap County, where Alton is located, U.S. Cellular holds a federal license to provide personal wireless services in the 800 megahertz or "cellular" band, while Unice1 holds a federal license to provide those services in the higher-frequency "PCS" band. Because signals at the higher frequency do not propagate as well as those at the lower frequency, PCS networks generally require a greater number of antenna sites to serve a given area than cellular networks.

2. Unice1 engaged plaintiff ICE, a company that deploys infrastructure for wireless networks, to locate sites in the Town where Unice1 could potentially locate antennas to close those gaps. ICE assigned this task to Kevin Delaney, its regulatory and compliance manager. For its part, U.S. Cellular retained both Kenneth Kozyra and Daniel Goulet, who work as consultants to wireless companies, to assist it in closing, in particular, one of the same gaps in the Town.

3. That coverage gap is located largely within an area surrounding the southern tip of Alton Bay, which is itself the southern tip of Lake Winnepesaukee, and located just to the northwest of the town of Alton proper. This area includes portions of Routes 11 and 28A, which run from the town proper, past the tip of Alton Bay, and alongside the eastern and western

shores of the bay, respectively. The area also includes a portion of Route 28, which, beginning just to the southeast of the town proper, runs to the east of, and at a higher elevation than, Route 28A. Route 28 continues on the path for roughly three miles until it intersects with Route 28A again at a point about one mile east of Alton Bay, then heads in a northeasterly direction for several miles before reaching the town line between Alton and Wolfeboro.

5. U.S. Cellular's gaps in the vicinity of Alton Bay included: a small area along the eastern edge of Route 11, just south of the tip of the bay; several stretches of Route 28A between its intersections with Route 11 and Route 28; and nearly all of Route 28A as it runs parallel to Route 28 along that same stretch. Unicef also had gaps in its coverage in the vicinity of Alton Bay, including, inter alia, portions of Routes 11, 28, 28A, and 140 (which intersects with Route 11 south of Alton Bay).

Plaintiffs' search for wireless antenna locations

6. Much of the terrain within a few miles of Alton Bay consists of mountains, many with elevations reaching more than 1000 feet, rising up steeply from the bay. Many of these slopes are heavily forested and inaccessible by existing roads. Such mountains, hills, ridge lines, and trees can obstruct the path of the radio signals transmitted through wireless networks.

7. When Unice1, through ICE, began looking for potential wireless antenna sites in the Town, its zoning ordinances limited the siting of personal wireless facilities to four "overlay districts." These districts generally encompassed the areas of greatest elevation within the Town. The overlay districts included Prospect Mountain, an area several miles to the southeast of Alton Bay, and Old Wolfeboro Road, named for a thoroughfare traversing a ridge line running roughly parallel to, but to the east of and at a higher elevation than, Route 28.

8. Prospect Mountain was home to a wireless tower at this time, but placing an antenna there would not have, in and of itself, remedied either Unice1's or U.S. Cellular's coverage gap in the vicinity of Alton Bay. Nevertheless, Unice1 planned to add an antenna to the Prospect Mountain tower as part of its plan to provide coverage in the Town, and began looking for additional sites within the overlay districts.

9. Also around this time, the Town's planning board was considering an application to build a tower in one of the other overlay districts, Old Wolfeboro Road. The application was later approved, and a tower was built, on that site--which has come to be called the "National Grid" or "GridComm" tower--though neither Unice1 nor U.S. Cellular has since placed an antenna there (another carrier, Sprint Nextel, has).

10. Unicef eventually determined that placing an antenna within any of the overlay districts would not be feasible. In particular, Unicef concluded that siting an antenna in any of the districts would leave significant gaps, as well as that two of the districts, Straightback Mountain and Mount Bet, could be accessed only by building a new road and utilities, which would require blasting and tree-cutting.³

11. Unicef then began looking at potential antenna sites outside of the overlay districts, both in the vicinity of Alton Bay and in another area known as Roberts Knoll, which is in the northeastern part of the Town, near the Wolfeboro line. As part of this search, ICE sent letters to the record owners of ten different properties in the Alton Bay area, inquiring as to their interest in selling or leasing the parcel to ICE for the construction of a wireless communications tower. Two of these properties were located on Lakewood Drive, which runs roughly parallel to the western shore of Alton Bay for about a mile. The rest were located on the eastern side of the bay, generally on and around a prominence known as Miramachie Hill.

³Furthermore, in response to an initial inquiry from ICE, in December 2005, the owners of the land comprising both Straightback Mountain and Mount Bet indicated that they had no interest in selling or leasing it.

12. Seven of these landowners did not respond to ICE's inquiry. One of them did not because, as it turns out, the parcel in question--53 Miramachie Hill Road--was not owned by her, but by the Slades who, by December 2005, were publicly opposing the placement of a wireless tower in the vicinity of Miramachie Hill.

13. Four of the other landowners solicited by ICE expressed interest in selling or leasing their property. But ICE ultimately determined that only one of these properties, which was located at 486 East Side Drive, was a feasible location for a wireless tower. As to the three other properties, one was too small to accommodate the tower and the associated "fall zone" required by the Town's zoning by-laws; another did not allow access to the portion of the site where the tower would be located; and a tower at the third property would have left significant gaps in coverage, and also have been "extremely visible," according to the trial testimony.

14. Indeed, Delaney testified that ICE decided against siting on this third property--located on Lakewood Drive, on the western side of Alton Bay--"based on feedback from the town on visibility and their reaction to certain locations." Goulet further explained that many areas on the western side of the bay are either "highly visible" or divided into campsites or other

parcels that are too small to accommodate a wireless tower. So, aside from the two Lakewood Drive parcels, ICE did not search for possible tower locations on the western side of Alton Bay.

15. Thus, ICE did not explore siting the tower on property on the west side of the bay owned by the Alton Bay Christian Conference Center ("ABCCC") and used as a summer youth camp. As Delaney explained, compared to the East Side Drive site, this property is "much closer to the bay itself and close to where people congregate in the town. There's shops down there as well as miniature golf, and [a tower there] would be highly visible from Route[s] 11 and 28A." The ABCCC is located less than half a mile uphill from the dock for the Mt. Washington Cruise Line, where, as the chairman of the Alton ZBA later observed at a public hearing, "a great number of people come to view this lake [and] the surrounding mountains."

16. Furthermore, Goulet testified at trial that, during U.S. Cellular's search for a wireless site, he never did any computer modeling of coverage from the ABCCC property because it is less than 600 feet in elevation, "just a little higher than the lake"--and lower than tree-lined ridges "in excess of eight, nine hundred feet" in elevation between that site and U.S.

Cellular's coverage gaps on the eastern side of the bay.⁴ So, as Goulet explained, U.S. Cellular "would not have looked at a site that was only some 540 odd feet to shoot through trees and over ridges to cover the gaps that was [sic] in part of U.S.

Cellular's coverage areas [T]he Christian Conference Center doesn't even cover the west side of the bay. I wouldn't have expected it to cover the east side of the bay."⁵

⁴The Slades presented testimony from a member of the ABCCC board of directors, Muriel Stinson, about part of its property on the western side of the bay, known as "Camp Advenchur." Stinson stated in her trial affidavit that "Camp Advenchur is at a considerably higher elevation than the [ABCCC's] lakeside facility (perhaps 120 feet higher)." The Slades, however, did not introduce any topographic map of the area or, for that matter, even a scale map of the "Camp Advenchur" site, and Stinson disclaimed, in her trial testimony, any specific knowledge of the site's dimensions. (She testified principally that, in June 2006, she had submitted a form that U.S. Cellular had emailed her to provide information about the camp as a potential tower site, but had never heard back.) The topographic map of the larger Alton Bay area that the Slades did put into evidence shows that the "Camp Advenchur" site reaches an elevation exceeding 700 feet, but there is no way to tell where that point is relative to the many cabins and other existing buildings on the site, which is used as a summer camp for children.

⁵Goulet stated in his trial affidavit that "it is easy for [him] to conclude, even without computer modeling, that a site in [the] vicinity [of the ABCCC property] would not duplicate the coverage of the proposed 486 East Side Drive site" because "signals would be blocked by the topography from reaching Route 28 and the northernmost portion of 28A." At trial, the Slades moved to strike this statement as undisclosed expert opinion, but the court conditionally allowed it subject to ruling on the admissibility of the Slades' proffered--but untimely disclosed--expert testimony. Because, as explained infra, the court rules that the Slades' improperly disclosed expert testimony is

17. In May 2005, ICE bought the property at 486 East Side Drive from its then-owners, who insisted on an outright purchase (rather than a lease or an option to purchase). Generally, building a wireless tower in New Hampshire costs about \$500,000 in acquiring the land, obtaining the necessary permits, designing and building the tower, and improving the site. In addition, each carrier who locates on the tower can expect to pay about \$500,000 for its antenna and related equipment (and then to pay a monthly rental charge for space on the tower).

18. In late 2005, U.S. Cellular began looking for an antenna site in Alton so it could fill "major gaps in service" there, particularly in the town proper and along Routes 11, 28, and 28A. See ¶ 5, supra. Like Unicel, U.S. Cellular had concluded that this could not be accomplished by siting an antenna within any of the wireless overlay districts imposed by the ordinance in effect at that time.

19. U.S. Cellular determined, however, that an antenna site "of modest height" at the top of Pine Mountain, on the western side of Alton Bay about one and a half miles from the shoreline, would potentially close the gaps. So Kozyra, acting on U.S.

inadmissible, it grants the Slades' motion to strike Goulet's undisclosed expert testimony as well. The court notes, however, that the Slades did not move to strike the testimony Goulet gave at trial about the ABCCC site, which they elicited themselves.

Cellular's behalf, identified the six parcels "that were the best in terms of being located at or near the top of [Pine] Mountain and also having at least potential access" from existing roads. These parcels were owned by three different people, to whom Kozyra wrote in February 2006, offering to lease approximately one quarter acre of their property, for around \$10,000 a year, to host a cell tower. Kozyra followed up on these letters by attempting to call their recipients. Each of them, however, either failed to respond or informed him that they were not interested in his proposal.

20 In May 2006, Kozyra returned to Pine Mountain, with a U.S. Cellular engineer, to attempt to identify other potential sites. They concluded that none of the parcels in the area, including the ones that Kozyra had asked about leasing, "would be feasible" because "they were either too low in elevation or else were on the north or west face of the mountain, and these factors made it obvious that at least without a very tall tower, the top of the mountain would block the signals and not allow [them] to reach the targeted coverage area."

Plaintiffs' initial applications for zoning relief

21. In September 2005, ICE and Unicel filed an application with the Town's Zoning Board of Adjustment ("ZBA") seeking variances to construct and operate a 120-foot wireless monopole

tower on the parcel at 485 East Side Drive.⁶ ICE and Unice1 simultaneously filed an application with the ZBA seeking variances to construct and operate a 120-foot wireless tower at another site, known as Roberts Knoll Campground, located approximately three miles to the northeast of the East Side Drive site, near the Wolfeboro line. These applications were necessary because, as already discussed, the Town's zoning by-laws in effect at the time limited wireless towers to the overlay districts, and both of the proposed sites were outside of the overlay districts (and in districts with height limitations less than the 120 feet proposed for each tower).

22. The application for the tower at the East Side Drive site indicated that, at 120 feet, it could accommodate wireless antennas for at least five different service providers, with the antennas to be spaced at 10 foot intervals along the tower, beginning at an elevation of 80 feet, as well as two dish antennas at an elevation of 75 feet. The application also stated that, at that time, Unice1 was the only service provider that planned to place an antenna on the tower.

23. While a public hearing on the applications was originally scheduled for October 2005, the ZBA did not hear any

⁶A "monopole" tower is a single, self-supporting column, usually made of steel.

testimony on them until a session in December 2005. At this session, representatives of ICE and Unicef gave a presentation in support of the application for the tower at the East Side Drive property, while David Slade spoke in opposition to it. Other than requesting additional information from the applicants (which they later provided), the ZBA did not take an action on the application at this session.

24. Slade, a partner at the Washington, D.C., office of an international law firm, Allen & Overy, owns a 60-acre parcel on Miramachie Hill abutting the proposed East Side Drive site. Slade practices in the area of project finance, assisting clients in developing infrastructure--including, ironically, electric transmission and telecommunications networks--in foreign countries. Slade and his wife bought the Miramachie Hill property from his grandmother in 2001, and plan to make it their permanent home at some point. While the Slades would be able to see the proposed tower from their Miramachie Hill property, it would not impact their view of the lake from there.

25. In late January 2006, the ZBA retained (at the expense of ICE and Unicef) an independent radiofrequency engineer, Mark Hutchins, to evaluate the proposed cell towers. While Hutchins was working on his evaluation, in February and March 2006, the ZBA did not take any action on the applications.

26. In late March 2006, Hutchins completed a report of his evaluation. In relevant part, the report stated that "Unicel has shown inadequate coverage within the Town" and that providing "adequate PCS coverage, particularly north of Route 28A and the northern section of Route 28 . . . cannot be accomplished within the existing overlay districts at the maximum heights allowed in each." The report further stated that Unicel "still cannot provide adequate PCS coverage to [these] areas" even if it placed antennas on both the existing Prospect Mountain and National Grid towers, see ¶¶ 8-9, supra, so that "new facilities are warranted." He added that "[r]oaming, or the use of services that might be available from competing providers, is not a viable coverage alternative for Unicel customers." Hutchins delivered this report at an April 2006 public hearing before the ZBA.

The revised personal wireless service facilities ordinance

27. In the meantime, the Town's planning board was drafting a new personal wireless service facilities ordinance and, in fact, had held a public work session for that purpose in December 2005, less than two weeks after the hearing on ICE's applications before the ZBA. The planning board also held a public hearing on the draft ordinance in January 2006. While the Town provided public notice of this hearing as required by New Hampshire law, neither ICE nor Unicel was separately notified of the proposed

ordinance until January 10, 2006, one week prior to the second public hearing on it. The ordinance was ultimately approved by a majority of the Town's voters at its annual meeting in mid-March 2006.

28. The new personal wireless facilities ordinance, codified as section 603 of the Town's zoning by-laws, eliminated the four wireless overlay districts that existed under the prior by-law and allowed such facilities in all zoning districts in the Town instead. The new ordinance did, however, impose other restrictions on wireless facilities. First, the ordinance required the applicant to show that such a "facility's effect has been minimized on the viewshed containing the facility, and that the facility will not visually dominate any viewshed in the Town (though "viewshed" is not defined).

29. Second, the ordinance imposed restrictions on ground-mounted personal wireless facilities relative to the trees existing on the site. The ordinance stated that such facilities "shall not project higher than ten feet above the average tree canopy height of the trees located within an area defined by a 50 foot radius or perimeter of the mount, security barrier, or designated clear area for access to the equipment, whichever is greater." The ordinance further provided that

ground-mounted personal wireless service facilities
shall be surrounded by a buffer of dense tree growth

that extends continuously for a minimum distance of one hundred fifty feet from the mount, security barrier, or designated clear area for access to equipment, whichever is greatest, and screens views of the facility in all directions. The easement or lease shall provide that the trees within the buffer shall not be removed or topped, unless the trees are dead or dying and present a hazard to persons or property. If removed for this reason, they must be replaced, unless Nature has provided a buffer.

30. Just prior to the April 2006 public hearing on their applications, see ¶ 26, supra, ICE and Unice1 amended them in response to the Town's new personal wireless facilities ordinance. Within the next month or so, Kozyra learned of Unice1's application to construct a wireless tower at the East Side Drive site. U.S. Cellular's engineers determined that "antennas at 110 feet in this location would adequately close its coverage gap in the area." In June 2006, then, U.S. Cellular joined the pending application for the tower at the 486 East Side Drive site, explaining that it wanted to install an antenna at the tower at a height of 110 feet.

Hutchins's conclusions: Evans Hill and tower height

31. The ZBA asked Hutchins to complete an addendum to his report to reflect the new ordinance. After Hutchins began this work, he suggested that ICE and Unice1 consider using--as an alternative to either the East Side Drive site, the Roberts Knoll site, or both--a site known as Evans Hill. Evans Hill is located

approximately one mile to the north, and slightly to the east, of the East Side Drive site, and is approximately 100 feet higher in elevation. Compared to the East Side Drive site, Evans Hill is slightly further from the eastern shore of Alton Bay, but closer to the southern shore of Winnepesaukee proper. In fact, under the prior version of the Town's personal wireless facilities ordinance, Evans Hill was designated as a protected view shed.

32. In response to Hutchins's suggestion, Unice1 analyzed the coverage it could obtain from a site located on Evans Hill. Unice1 concluded that this coverage, even when combined with coverage from its existing antenna at Prospect Mountain, would leave two large gaps along Route 28A north of its intersection with Route 11 at the tip of Alton Bay, as well as a smaller gap in coverage along Route 28.

33. In June 2006, Hutchins provided the addendum to his earlier report, evaluating the proposal for the cell towers in light of the revised personal wireless service facilities ordinance--which, again, limited the height of such facilities to ten feet above the average tree canopy in the vicinity. In the addendum, Hutchins observed that, while this provision "evidences the desire of many towns to minimize the visual impact of antennas," it "sets up a conflict with the [radiofrequency] engineering requirement to adequately clear vegetative

obstructions--something even more important at higher frequencies," such as PCS, see ¶ 1, supra. In fact, Hutchins noted, "antenna height clearance, as a rule of thumb, is fifteen feet above clutter."

34. Hutchins reported in the addendum that he had received conflicting information on the average tree canopy height at the East Side Drive site. A forester hired by the Town had calculated the average tree canopy height at 61 feet, while Unice1 reported that its engineer had calculated the average tree canopy height at 84 feet (and noted that the heights of trees at the site ranged from 72 feet to 95 feet).⁷

⁷The ordinance defined "average tree canopy height" as

The height of all trees surrounding a [personal wireless services facility] shall be measured from a base line extending outward from the point at which the base of the ground mount contacts the ground The base line shall extend outward 360 degrees from this contact point parallel to the horizon and is independent from the slope of the surrounding ground. The average tree canopy height shall be determined by inventorying the height of the base line of all trees within an area that extends for a distance of fifty feet outward from and 360 degrees surrounding the contact point along the base line from the base of the mount, security barrier, or designated clear area for access to equipment, whichever is greatest. The height that each tree extends above the base line within this area shall be measured and inventoried and the average height shall be calculated. Trees that will be removed for construction shall NOT be used in this calculation.

In applying this definition, the forester figured that a 100 foot by 100 foot square "compound" enclosing the base of the tower (as

35. Hutchins ultimately concluded, as to the proposed East Side Drive facility, that "antenna height should be no lower than 75 feet above ground level, given the 60 foot average canopy." Hutchins did not explain, in either the addendum or his trial testimony, why he had chosen the forester's calculation (which was actually 61 feet), rather than Unice's calculation.⁸ He did testify, however, that the ordinance's limitation on tower height relative to the surrounding tree canopy is "arbitrary . . . from an engineering standpoint" and does not "bear any relationship to finding a tree height that might impact those antennas."

36. Based on computer modeling, Hutchins concluded that, with an antenna placed at a height of 75 feet at the proposed East Side Drive site, PCS service along much of Routes 11 and 28 near, and south of, the tip of Alton Bay would be at a signal strength of between -85 and -95 dBm, while signal strength would be less than -95 dBm where those roads intersected in Alton proper. Hutchins testified in his trial deposition that, while

shown on the plans for the facility) would translate into a circle with a radius of 70 feet measured from the base. Thus, he calculated the average height of a sample (but not all) of the trees beyond that radius but within a larger concentric circle of 120 feet measured from the base (i.e., within 50 feet of the "circle" drawn around the square of the compound).

⁸When asked this question at his trial deposition, Hutchins gave an elliptical response, the substance of which seemed to be that he adopted the forester's calculation because he assumed that the Town would have preferred he do so (rather than because he found the forester's methodology sound).

"your phone will work" at -95 dBm, "even in 2006, that was becoming unacceptable, and if you had an emergency call, you didn't want to have to worry about that."

37. Hutchins noted in the addendum that, even with a minimum antenna height of 75 feet, the overall height of the tower should be taller. UniceL's proposal for the facility included a microwave dish antenna so that, as required for the operation of the network, the tower could "link" to other nearby towers. Hutchins called this "not an unreasonable goal, since it is often difficult and expensive to use wired (land-line) connections to link cells together Dish-type antennas are typically utilized and the Ordinance anticipates them." Thus, Hutchins explained, "[w]ith microwave dishes centered at 75 feet, U.S. Cellular would be at 85 feet and UniceL at 95 feet Given the likelihood of even more providers in the area, it is not unreasonable to consider another 10 or 20 feet since collocation on one structure may avoid additional structures in this portion of the Town."⁹ In fact, under the Town's ordinance,

⁹In addition, as Delaney testified, "tower height is generally five feet above the highest installation point or 'centerline'; otherwise the antennas, which can be as long as eight feet, would protrude above the top of the tower."

"[c]o-location, both vertical and horizontal, is encouraged for all personal wireless service facilities."¹⁰

38. Hutchins further concluded that "[u]se of Evans Hill, assuming it is available, could provide coverage similar to what is likely from the East Side Drive site." He acknowledged that siting the tower at Evans Hill, rather than East Side Drive, would leave "uncovered areas of Route 28A"--as ICE and Unicel had already determined, see ¶ 32, supra. Hutchins opined that those gaps "should be addressed" either by (a) placing antennas on the existing National Grid tower, or (b) erecting another tower, on the western side of the bay, "up the hill from the Bay in the vicinity of the [ABCCC]"--a location that had been depicted on a "search-area map" he had been given by Unicel.¹¹

39. Hutchins did not provide computer modeling of the coverage this second proposed alternative (building new towers at both Evans Hill and on the western side of the Bay) would generate. Nor did he provide computer modeling of the first proposed alternative (building a new tower at Evans Hill and

¹⁰The ordinance defines "vertical co-location" as "the use of a single mount on the ground by more than one carrier" and "horizontal co-location" as "the use of more than one mount on the same site by more than one carrier."

¹¹Hutchins included an excerpt of this map in his June 2006 report, but it does not appear in the record in its original form, so far as the court can tell. Based on the excerpt (which is difficult to read clearly), it does not appear that the location depicted by Hutchins is actually on the ABCCC property.

adding an antenna to the existing National Grid tower) with antenna heights of 75 feet, as he had called "reasonable." He did, though, provide computer modeling of his first proposed alternative with antenna heights of 95 feet at the Evans Hill site and 145 feet at the National Grid site. This showed PCS service along the stretches of Routes 11 and 28 south of the tip of Alton Bay would be at a signal strength between -85 and -95 dBm (and, again, Hutchins said -95 dBm was "becoming unacceptable" even at the time he prepared the addendum in 2006).

40. In response to Hutchins's addendum, Goulet, the radiofrequency engineer hired by U.S. Cellular, looked into lowering the height of its proposed antenna at East Side Drive (110 feet). He concluded that "while a height of 100 feet was not absolutely necessary, a reduction of height to 90 feet would cause U.S. Cellular's coverage to be degraded to the point where the coverage objective could not be met without an additional site." Goulet further concluded that "antennas installed at 110 feet on a tower at the top of Evans Hill" would leave "significant gaps" in cellular service, including nearly all of Routes 28 and 28A along the eastern side of Alton Bay and a portion of Route 11 to the south of the bay.

41. At trial, Goulet explained that, in reaching this conclusion, he used -92 dBm (as opposed to -95 dBm) as the

"threshold" for U.S. Cellular's in-vehicle coverage, because that was the signal strength that U.S. Cellular had determined was necessary to provide competitive service to its customers. Goulet noted that "every three dB you cut your power in half." Goulet also recounted that, in his computer modeling, he had used a "bin size" of 30 meters by 30 meters (about 98 feet by 98 feet), so that "everything within that 30 meters gets averaged and stamped with a [single] height," including ground contours and trees. Hutchins's modeling, in contrast, had used a bin size of 500 feet by 500 feet, so that it determined ground heights by averaging the data in an area more than nine times the size of what Goulet had used. Goulet explained that this made Hutchins's modeling less accurate.

42. Goulet testified that his "analysis shows that Evans Hill is too far northwest, and the hill that the proposed [East Side Drive tower] is on is actually what is causing the blocking on Route 28 and 28A that you are getting from a site on Evans Hill." He added that, even if antennas were placed both on a new tower at Evans Hill and the existing National Grid or "GridCom" tower, as Hutchins had suggested, "the coverage from the Evans Hill site stops at the proposed location. The GridCom coverage stops just above the GridCom site because you've got some

relatively high terrain blocking it there. You have a ridge. So you still are left with a gap on 28 and 28A."

43. Nevertheless, also in response to Hutchins's suggestion of Evans Hill as an alternative site, ICE sent a letter by certified mail, return receipt requested, to the record owner of that property, an entity in Boston called "Christian Camps & Conference."¹² The letter, which expressed interest in buying or leasing the land atop Evans Hill for the purpose of constructing a wireless tower, was returned stamped "refused." ICE sent the same letter the next month, but received no response. Delaney explained that the Evans Hill property was unoccupied and, indeed, unimproved, and that he "most likely" tried to find a phone number for Christian Camps & Conference to get ahold of it, because that was "typically part of his process" in contacting the owners of potential sites (though he could not specifically recall having done so).¹³

¹²This entity is apparently unrelated to Alton Bay Christian Conference Center, or ABCCC.

¹³In his trial affidavit, Slade testified that "[a]s a property owner in Alton Bay, [he] know[s] that Christian Camps and Conferences operates separate boys and girls camps in Alton . . . and have their offices at the camp locations." Slade further stated that he knows the camp's "mailing and local address" and telephone number "from simply checking the camp's website," and attached screenshots from the website, www.christiancamps.net, to his affidavit (though the Slades never tried to introduce the screenshots as trial exhibits). The plaintiffs objected to Slade's testimony as to Christian Camps and Conferences, and the accompanying screenshots, as hearsay.

44. Unice1 and U.S. Cellular relayed Goulet's analysis, and ICE's unsuccessful efforts to contact the owner of the Evans Hill parcel, to the ZBA in late July 2006. They also explained, through the affidavit of another radiofrequency engineer, that regardless of the "average tree canopy" height at the East Side Drive site as defined by the ordinance or calculated by the forester, the site contained several tall trees (at heights of 70 feet or more) within a 100-foot radius of the tower. The engineer continued that "[it] is reasonable to assume that additional tall trees similar to the ones [identified by the forester] will be present" throughout the entire area that surrounds the tower, at a radius measuring between 150 and 600 feet, before the elevation (and hence the height of trees relative to the tower) starts to decrease. The engineer also pointed out that, as the forester had noted, trees can grow up to one foot in height per year, so that they would "increasingly degrade the coverage from this facility over its operating life if it is not tall enough to clear the surrounding foliage." The upshot of the existing forestation at the site, then, is that "in effect [the plaintiffs] would have to clear cut" the entire area

They are, see Fed. R. Evid. 801, and the Slades did not claim any exception making this evidence admissible. The objection is sustained, and the court cannot consider this evidence (though, ultimately, the availability of a site on Evans Hill makes no difference to the outcome here regardless, see infra ¶ AA).

surrounding the tower at a radius between 150 and 600 feet "in order to avoid trees from interfering with the signal at the lower heights proposed." Again, the revised ordinance prevented any cutting of trees within 150 feet of the "mount, security barrier, or designated clear area for access to equipment, whichever is greatest," and, furthermore, required that the "facility's effect has been minimized on the viewshed containing the facility, see ¶¶ 29-30, supra.

45. Hutchins also concluded in his June 2006 addendum that radiofrequency coverage studies had shown "that existing structures are unable to adequately close cellular and PCS coverage gaps along Routes 28 and 28A." Nevertheless, a different outside engineer hired by the Town advised the planning board in August 2006 that Unice1 and U.S. Cellular had not provided information to show that "no existing structures are suitable." In response, an engineer working for Unice1 submitted propagation models showing that, even if an antenna was placed at a height of 120 feet at the Evans Hill location, and separate antennas at each of five additional locations--the steeples of four different local churches and the Town Hall--coverage gaps would still remain along Routes 28 and 28A.¹⁴

¹⁴Furthermore, after the plaintiffs contacted two of these churches about locating wireless facilities on their property, one of them indicated it had no interest in such a plan, and the other failed to respond at all.

Public hearings on the applications in fall 2006

46. In September 2006, the ZBA and the Planning Board held a joint public hearing on the application.¹⁵ The Slades and others spoke in opposition, while the applicants presented testimony and other evidence in support.

47. Hutchins testified at the hearing. First, he opined that, based on the information on specific trees at the site that could serve to obstruct signals, see ¶ 44, supra, the proposed microwave dish "probably needs to be somewhere in the 90-, 95-foot range at the East Side Drive site as a minimum height," putting Unice'l's antenna at 105 feet and U.S. Cellular's at 115 feet and the overall height of the tower at 120 feet.

48. Second, Hutchins testified that he had studied Evans Hill as an alternative site and concluded that, even if antennas were also placed on the National Grid tower, "that really wouldn't be a practical solution . . . in theory, that might work, but I don't think it would work really well; where the East Side drive facility really fills the hole." He explained that the National Grid tower is "far enough to the east that [placing antennas there] then starts to open up areas in Alton Bay itself and along [Routes] 11 and 28A going up the [east] side [of the bay], which are filled by using the East Side Drive facility."

¹⁵The Planning Board was considering an application for site plan review approval.

Hutchins added that he had "looked at a number of other possibilities" but that he and the applicants "were pretty much in agreement that there isn't anything that's jumped out at me that would work as an alternative site."

49. The boards took no action on the applications at the September hearing, but they did schedule a "balloon test" for the end of the month to simulate the visual impact of the proposed tower. In response to a comment from another member of the planning board expressing concern about the height of the tower, the chairman observed that "so far, the applicant hasn't refused to do anything They haven't said, no, we're not going to do 95 feet or whatever the height may be."

50. The balloon test showed that a tower at the East Side Drive site, at a height of 120 feet, would be visible above the treeline from several spots, including along the bay. Those spots included the dock for the Mt. Washington Cruise Line, located on the eastern side of the tip of the bay, off of Route 11--and, as the chairman of the Alton ZBA later commented, a place "where a great number of people come to view this lake [and] the surrounding mountains." The dock is located less than half a mile downhill from the ABCCC.

51. The balloon test also showed, however, that even a 75-foot tower at the East Side Drive location would be, in the words

of the chairman of the planning board, "plainly visible from many locations." There was also trial testimony that lowering the height of the tower by 10, or even 20, feet from the proposed height would not have made a significant difference to its visual impact. No balloon test was done to simulate the visual impact of a tower of any height at the Evans Hill site, which, again, is approximately 100 feet higher in elevation than, and just about one mile away from, the East Side Drive site.

52. After the balloon test was completed, the ZBA and the Planning Board held another joint public hearing on the application, in October 2006. After the chairman of the planning board suggested that a tower of 20 feet above the average tree canopy should be sufficient, ICE's director of operations responded, "I think we have presented enough evidence, and I think your own experts have presented the evidence, that at that extreme low height, it simply doesn't work," and that the applicants needed a 120-foot tower "to make it operational." Nevertheless, he stated that the applicants were "willing to work with" the boards to make the tower "as least intrusive as we can . . . as long as it makes some economic sense and operational sense." Toward that end, he suggested a 120-foot "monopine" tower disguised as a tree--an approach that entailed "additional expense" but that he saw as a "fair compromise."

53. Before the close of the hearing, the planning board made a number of findings, reported orally. These included, as to both the East Side Drive proposal and the Roberts Knoll proposal, that "a 120-foot tower would dominate the view shed of Alton Bay, which is in violation of the zoning ordinance." The planning board also found that the applicants had "not investigated a multiple unit network of 4 to 5 wireless facilities or more as Ordinance 603 envisions and provides unlimited sites in the town" [sic] and "has not made inquiry of possible site owners expressing the esthetic limitations of ordinance 603 and therefore, has limited responses."¹⁶ The planning board voted to report these findings to the ZBA for its

¹⁶It is unclear where the personal wireless services ordinance "envisions" or imposes these requirements. In a section entitled "Existing Structures: Burden of Proof," the ordinance provides that the applicant seeking to construct a new ground-mounted facility "shall have the burden of proving that there are no existing structures which are suitable to locate its personal wireless service facility and/or transmit or receive radio signals." The ordinance explains that, "[t]o meet that burden," the applicant must "to the extent applicable" (a) "submit to the planning board a list of all contacts made with owners of potential sites regarding the availability of potential space for a personal wireless service facility," (b) "provide copies of all letters of inquiry made to owners of existing structures and letters of rejection," and (c) have a licensed civil engineer certify any claim "that a structure is not capable of supporting a personal wireless service facility." While this provision requires the applicant to show that there are no suitable existing structures, it stops short of requiring the applicant to show that there are no alternative sites. The court can find nothing in the ordinance that requires an applicant to "investigate a network of 4 to 5 wireless facilities or more."

use in considering the applications for variances for both towers, but did not take any action on the applications for site plan review for either tower (other than to continue the hearing on them to November 2, 2006).

54. At the continued joint hearing, the planning board approved the following motion: "The board does not feel that we have enough information to make a decision. We would like to see a study that would illustrate the effectiveness of a network of telecommunications facilities in accordance with our new zoning ordinance with all possible locations to be considered at the expense of the Town of Alton." There was no explanation at the meeting--and it is not clear to the court--how this approach "accords" with the revised personal wireless facilities ordinance. See n.16, supra. In any event, so far as the court can tell from the record, the study was never done.

55. The ZBA held another public hearing on the applications in late November 2006. At this hearing, the ZBA approved the requested variances for the proposed 120-foot tower at the Roberts Knoll site.¹⁷ In response to a question from a board member about lowering the height of the East Side Drive tower to 90 feet, Kozyra explained that this would likely not enable even three different carriers to place antennas at the site because

¹⁷The planning board later approved the site plan for the Roberts Knoll site.

the lowest antenna (at 70 feet, given the necessary 10 feet between antennas) would be too close to the trees. The ZBA continued the hearing without taking any further action on the variance application for the East Side Drive facility (and the planning board voted to table the application for site plan review until the ZBA decided that application).

56. At the continued public hearing, in December 2006, the ZBA voted to deny the application for the variance necessary to build the tower at the East Side Drive site. As reported in a subsequent "Notice of Decision," the ZBA found that granting the variances would be contrary to the public interest and out of harmony with the spirit of the ordinance, and would fail to accomplish substantial justice. The board members' explanation of their decision at the hearing itself focused on the visual impact of the tower.

57. At a public hearing in February 2007, the ZBA denied the plaintiffs' motion for reconsideration of the denial.

Procedural history

58. The plaintiffs commenced this action in March 2007, claiming that the denial of the variances for the proposed tower at the East Side Drive site violated the TCA, both in that it was unsupported by substantial evidence in a written record, see 47 U.S.C. § 332(c)(7)(B)(iii), and has the effect of prohibiting the

provision of wireless services, see id. § 332(c)(7)(B)(i)(II).

The plaintiffs asked the court to issue an injunction requiring the Town to issue the variances, site plan approval, "and any further approvals required to construct the proposed facility."

59. In June 2007, the Slades, through counsel, filed a motion to intervene, claiming an interest in the litigation on the theory that, if the court granted the relief requested by the plaintiffs, the resulting tower would interfere with the views from their property in Alton and diminish its value. They argued that the Town would not adequately protect this interest for them in this litigation because "only a landowner who stands to suffer [such] harm can adequately represent the loss of the panoramic views and the enjoyment from such." The plaintiffs did not oppose the motion, which was granted. Order of Aug. 2, 2007.

60. At that point, a scheduling order was in place which, in relevant part, imposed a discovery cutoff of January 15, 2008, and expert disclosure deadlines of October 1, 2007, and November 15, 2007, for the plaintiffs and the defendant, respectively. Order of May 21, 2007. The Slades did not engage in any discovery, designate any expert witnesses, or--as noted at the outset, file a pleading, or anything else of substance, that either responded to the plaintiffs' claims or set forth any claims on the Slades' behalf.

61. As contemplated by the scheduling order, the plaintiffs and the Town cross-moved for summary judgment on the effective prohibition claim in May 2008.¹⁸ In support of its summary judgment motion, the Town argued that "feasible alternatives exist to ICE's proposal of a large, multi-carrier gap to close [the] alleged gap in coverage," i.e., "shorter, single carrier towers." In support of this argument, the Town relied on the proffered expert opinion testimony of a consultant on wireless facilities, David Maxson, that "position[ing] three 70-foot poles around the targeted area [would] achieve substantially the same coverage as the proposed tower." While the locations of these poles were shown as points on an accompanying map, Maxson did not otherwise identify the locations (or say whether they are on property that would be suitable or available for siting wireless facilities). In any event, the locations, which are clustered around the proposed East Side Drive location, include neither Evans Hill nor the ABCCC site.

62. The Slades did not file anything in response to the plaintiffs' cross-motion for summary judgment, or in support of the Town's. After hearing oral argument on the motions, in March 2009, the court denied them without prejudice in response to

¹⁸The plaintiffs also separately moved for summary judgment on their substantial evidence claim. Following a telephonic hearing, the court denied that motion in a margin order. Order of Apr. 9, 2008.

encouraging statements from counsel for the plaintiffs and the Town about the prospect of settling the case.

63. Settlement negotiations continued throughout the spring and summer of 2009, with counsel for the plaintiffs and the Town periodically reporting their progress to the court. In response to one of these reports, the Slades--who had still not filed anything of substance since they intervened--submitted a memorandum expressing their opposition to any settlement and asking the court to hold a hearing on ICE's effective prohibition claim. The Slades stated that the Town had already "presented appropriate arguments and supporting evidence that should lead the Court to uphold the local decision" to deny the variance for the proposed tower at the East Side Drive site.

64. As noted at the outset, the plaintiffs and the Town filed an agreement for judgment in March 2010, providing, inter alia, for the amendment of the ZBA's decision so that it granted a variance for a tower at East Side Drive at a height of 100 feet, as opposed to 120 feet.¹⁹ The court entered the agreed-

¹⁹Following the entry of judgment, U.S. Cellular (together with Verizon and AT&T Mobility) submitted an elevation drawing to the planning board, showing a 100-foot tower at the East Side Drive site, with an AT&T antenna at 80 feet, a U.S. Cellular antenna at 90 feet, and a Verizon antenna at 100 feet. When the Slades attempted to introduce this drawing at trial, the plaintiffs objected, arguing, among other things, that it amounted to evidence of compromise offers or negotiations. See Fed. R. Evid. 408. The court conditionally admitted the drawing subject to this objection, which is now sustained. The

upon judgment over the Slades' objection and closed the case. On their appeal, however, the court of appeals vacated the judgment and remanded the case to this court, ruling that "the Slades are entitled to resist the entry" of a judgment on the plaintiffs' claims "unless a violation of the [TCA] is proven." [Indus. Commc'ns](#), 646 F.3d at 80.

65. Following remand, the plaintiffs and the Town filed a "joint motion for an expedited hearing" on the plaintiffs' motion for summary judgment on their effective prohibition claim. In the motion, the Town expressly admitted that its refusal to permit a 100-foot tower at the East Side Drive location would amount to an effective prohibition on the provision of wireless services in violation of the TCA. The Slades, through the same counsel who had been representing them since they intervened, initially assented to a prompt hearing on the plaintiffs' summary judgment motion, but, prior to the agreed-upon hearing date, that

settlement between the plaintiffs and the Town, as embodied in the agreement for judgment, required the plaintiffs to "submit revised plans for site plan review by the Alton Planning Board," and "under [Rule 608](#), any evidence of the compromise agreement, or of performance, is inadmissible to prove . . . the validity . . . of the original claim." 2 Jack B. Weinstein & Margaret A. Berger, [Weinstein's Federal Evidence](#) § 408.03[4], at 408-15 (Joseph M. McLaughlin, ed., 2d ed. 1997 & 2012 supp.) (emphasis added). The Slades cannot use evidence that the parties began carrying out the settlement for the 100-foot tower to show that such a tower is a feasible alternative to the 120-foot tower that was rejected by the ZBA and, therefore, that the plaintiffs' effective prohibition claim is invalid.

counsel had withdrawn and been replaced by new counsel, who filed an objection to the motion for an expedited summary judgment hearing. In the objection, the Slades argued that they "are entitled to the same discovery, briefing, and presentation of evidence as any defending party in this type of case."

66. In ordering a prompt summary judgment hearing over the Slades' objection, the court observed that "the Slades did have an ample opportunity to engage in discovery and to submit briefing and evidence in connection with summary judgment but, so far as the court can tell, elected not to avail themselves of that opportunity." [Indus. Commc'ns & Elecs., Inc. v. Town of Alton](#), 2011 WL 2938368, at *2 (D.N.H. Jul. 19, 2011). Thus, the court rejected the Slades' request to postpone the summary judgment hearing so they could "obtain additional evidence and expert opinion on issues pertaining to the effective prohibition claim," noting that, "when asked to identify the basis for that relief during the most recent telephonic hearing, counsel for the Slades candidly admitted there was none." [Id.](#) at *3.

67. The Slades also noted in their objection to the expedited summary judgment hearing that they had acquired an additional parcel within the Town during the pendency of their appeal in this case, so "additional evidence should be permitted regarding the feasibility of locating a tower on this property."

As it turns out, this property is located on Evans Hill. Slade has also acquired another property on Evans Hill.

68. In September 2011, the court heard oral argument on the plaintiffs' motion for summary judgment on their effective prohibition claim, and denied it from the bench. The court then issued a procedural order directing the parties to make certain filings in connection with the upcoming trial. [Order](#) of Sept. 28, 2011. As noted at the outset, this order required the parties to file affidavits constituting the direct testimony of each of their witnesses, and to file exhibit lists by November 9, 2011, five days before the start of the trial, on November 14, 2011. At trial, each party made its affiants available for cross-examination.

Proffered Maxson testimony and other challenged evidence

69. The Slades filed a trial affidavit from Maxson, who had originally proffered an expert report on behalf of the Town in opposing the plaintiffs' summary judgment motion. Attached to this report, dated November 2007, were three maps that Maxon had prepared to model the expected PCS coverage from three different antenna placements:²⁰ (a) at 120 feet at the East Side Drive site, (b) at 71 feet at the East Side Drive site, and (c) on

²⁰While the key to each of the maps suggests that Maxson prepared them in color, only black-and-white copies have been submitted to the court.

three 71-foot poles placed at unnamed locations around the East Side Drive site.

70. In Maxson's trial affidavit, however, he explained that he had since been engaged to provide expert testimony on behalf of the Slades and that, in this "current engagement," he had "re-created" some of these models using different radiofrequency propagation software. But the only antenna placement that Maxson modeled for both his report and his affidavit was at the proposed East Side Drive site at a height of 120 feet, for PCS coverage.²¹

71. Based on the allegedly "re-created" models, apparently, Maxson opines in his affidavit that "[a] facility at the [East Side Drive] site does not completely address the [plaintiffs'] coverage objectives in Alton." In particular, Maxson identifies uncovered "sections of Chestnut Cove Road and Damon Shore Drive" --residential roads to the west of Route 28 that, even on Maxson's maps, are in fact almost entirely covered from the East Side Drive site, at least by PCS service.²²

²¹For his trial affidavit, Maxson also modeled cellular coverage from a 120-foot high antenna at the proposed East Side Drive site. Maxson states that he simply "reproduced [his] analysis" of this coverage using the new software, but his expert report contains no reference to any such analysis, whether in the form of a map or otherwise.

²²Maxson's affidavit also refers to "the weakness of the proposed site not fully serving along both Route 28 and Route 28A as one heads south from the proposed site," as purportedly "noted in [his] Expert Report." The report's only reference to a gap in coverage from a tower at the East Side Drive site is "a

72. Maxson further explains in his affidavit that, rather than "re-creating" the three-pole model discussed in his expert report for the Town since his engagement by the Slades, he had modeled the combined coverage attainable from three new antennas: on a new tower at the Evans Hill property owned by the Slades (at 90 feet), on a second new tower on the ABCCC property (also at 90 feet), and on the existing National Grid tower (at 100 feet). He opines that doing so "would fill in the coverage that is lacking from the proposed site" at East Side Drive.

73. Unsurprisingly, both before and during the trial, the plaintiffs objected to these (and other) proffered statements by Maxson as late-disclosed expert testimony, and to his "re-created maps" as late-disclosed exhibits. The plaintiffs also renewed their objection (raised in several pre-trial motions) that Maxon's opinions were inadmissible in any event because they were the product of unreliable methods and he was unqualified to give them. See Fed. R. Evid. 702.

74. The plaintiffs also objected to Maxson's proffered testimony, and any other evidence, that "Unicel was acquired by Verizon Wireless," another provider of personal wireless services, in August 2008--nearly a year after the ZBA, in the decision giving rise to this action, finally denied Unicel's

depression in coverage to the south of the site, primarily along Route 28A."

application for the variances necessary to site its proposed antenna at the East Side Drive site in early 2007. Because Verizon uses transmission technology that differs from what Unice1 was using at that time, Maxson explains, the Unice1 coverage maps submitted during the application process "do not depict Verizon Wireless [] coverage to New Hampshire subscribers" and, as a result, say nothing about any Verizon coverage gap.

75. A lengthy FCC order from August 2008, submitted by the Slades at trial, references a merger between Rural Cellular (Unice1's parent company) and another entity, which is itself a wholly owned subsidiary of a company known as AirTouch. [Cellco P'ship](#), 23 F.C.C.R. 12463, FCC 08-181 (Aug. 1, 2008). The order explains that, "[a]fter consummation of [this] transaction, [Rural Cellular] will be a wholly owned-subsubsidiary of AirTouch and a wholly-owned indirect subsidiary of Cellco."²³ [Id.](#) at 7-8. The effect of this merger was that "all licenses, leases, and authorizations [then] controlled by [Rural Cellular] and its subsidiaries," including RCC Atlantic, would henceforth "be controlled by Verizon Wireless." [Id.](#) at 8. Nevertheless, Rural Cellular "would continue to exist after closing as a wholly owned

²³As the order further explains, AirTouch is a subsidiary of Cellco, which is in turn "a general partnership that is a joint venture that is ultimately owned by Verizon Communications Inc. and Vodafone Group Plc., each through a series of intermediate companies." [Cellco P'ship](#), slip op. at 5-6 (parentheticals omitted).

subsidiary of Airtouch.” Id. at 1-2. The order further states that, in their applications to the FCC, Rural Cellular and Verizon “stipulate[d] that Verizon Wireless will integrate [Rural Cellular’s] . . . networks into Verizon Wireless’s existing operations over a period of about 18 months.” Id. at 46.

76. Based on the admissible evidence received at trial, as well as the record of the proceedings before the ZBA and the planning board on the plaintiffs’ application to construct the 120-foot tower at the East Side Drive site, this court finds that the ZBA’s decision to deny that application has the effect of prohibiting the provision of personal wireless services in violation of the TCA. See infra ¶¶ G-CCC.

Rulings of Law

Plaintiffs’ evidentiary objections

A. Before proceeding to the merits of the plaintiffs’ claims, the court must address their objections to much of the evidence introduced by the Slades at trial. First, the plaintiffs object to the lion’s share of Maxson’s proffered expert opinion testimony as untimely disclosed. Again, the scheduling order in this case set November 15, 2007, as the deadline for the defendant’s expert disclosures,²⁴ and the Slades

²⁴The Slades have never argued that this deadline did not apply to them and, in fact, they repeatedly characterize themselves as “intervenor-defendants.” In any event, if the

did not make any (even though they had intervened in the case several months beforehand).

B. The Town, however, properly disclosed Maxson as an expert witness, providing an expert report as contemplated by Rule 26(a) (2) (B) of the Federal Rules of Civil Procedure. The plaintiffs did not object (at least on procedural grounds) to the Slades' relying at trial on opinions that Maxson had disclosed in the expert report he prepared on behalf of the town (though they did object to those opinions under Rule 702). As discussed supra, however, this report did not disclose many of the opinions Maxson offered at trial on behalf of the Slades, including, most significantly, that placing antennas on new 90-foot towers on both Evans Hill and the ABCCC, as well as a third antenna on the existing National Grid tower, "would fill in the coverage that is lacking from the proposed site" at East Side Drive. Maxson's report also did not disclose any opinion projecting cellular (as opposed to PCS) coverage from the proposed East Side Drive site, nor did it include any of the coverage maps the Slades offered at trial--which, as Maxson acknowledged, he had "re-created" using different software long after he submitted his expert report. Neither the opinions nor the documents were disclosed until the

scheduling order did not apply to the Slades, they were still bound by the disclosure requirements of Rule 26(a) (3) (B), which require expert reports to be provided 30 days before trial. As discussed infra, the Slades did not make that deadline either.

Slades filed Maxson's trial affidavit on November 9, 2011, which was just five days before trial.

C. "If a party fails to provide information . . . as required by [Rule 26\(a\)](#) . . . , the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless." [Fed. R. Civ. P. 37\(c\)\(1\)](#). So, as the court of appeals has stated, "the baseline rule is that the required sanction in the ordinary case is mandatory preclusion" of late-disclosed information. [Harriman v. Hancock County](#), 627 F.3d 22, 29 (1st Cir. 2010) (quotation marks and bracketing omitted). The Slades have given no reason why this baseline rule should not apply here; to the contrary, they more or less acknowledged several months before trial that there was no reason they should be allowed to obtain additional expert opinion testimony even at that point. See ¶ 66, supra. Accordingly, the court cannot consider Maxson's late-disclosed opinions as to coverage from the plaintiffs' proposed East Side Drive tower or his proposed three-antenna alternative.

D. The same analysis applies to Maxson's proffered opinions that UniceL no longer exists following its acquisition by Verizon in August 2008 and, because of differences in technology between UniceL and Verizon, evidence that UniceL has

coverage gaps in Alton says nothing about any Verizon coverage gaps there. While the acquisition did not occur until several months after the applicable expert disclosure deadline and, as a result, could not have been covered in Maxson's expert report, he never supplemented his report to express his opinions about the effect of the acquisition on the claimed coverage gap in this case and, indeed, those opinions were not disclosed to the plaintiffs until five days before trial. Again, the Slades have not argued that this last-minute disclosure was substantially justified or harmless, nor have they articulated any other reason why Maxson's opinions as to Verizon's acquisition of Unicef should be allowed. So the court cannot consider those proffered opinions either.

E. Second, the plaintiffs argue that, because the only "relevant inquiry is whether the February 2007 final action of the Alton ZBA amounted to an effective prohibition at that point in time," evidence of events that took place after that decision is inadmissible. See Fed. R. Evid. 401, 402. This would include any evidence of: (1) Verizon's acquisition of Unicef in August 2008, see ¶¶ 74-75, (2) the plaintiffs' settlement of this action with the Town in early 2010, and the plaintiffs' subsequent "efforts to implement the settlement embodied in that decree," including their application to the planning board for approval of

the agreed-upon 100-foot tower, see ¶ 64 & n.19, supra, and (3) Slade's purchase of property on Evans Hill during the pendency of this lawsuit, see ¶ 67, supra. The plaintiffs' objection appears to have some merit. First, according to this court's research, the only court to consider the question has held that "the time frame that governs application of the [effective prohibition] standard is the time in which the municipal or local government in question makes its final determination as to the merits of a permit application." [Metropcs Inc. v. City & County of San Francisco](#), No. 02-3442, 2006 WL 1699580, at *13 (N.D. Cal. June 16, 2006). Second, as the plaintiffs point out, allowing evidence of post-denial events could force a plaintiff bringing an effective prohibition claim "to respond to a never-ending stream" of "developments in technology, regulations, property availability, and other new circumstances," with the length of the stream depending on something as arbitrary as how much time had passed, and therefore, how much things had changed, between denial and trial (here, that was some four and a half years).

F. Nevertheless, the court of appeals has generally eschewed any bright-line rules in deciding effective prohibition claims, see infra ¶ H, so this court is reluctant to rule that evidence of events transpiring after a local authority's final decision to disallow a wireless facility is categorically

irrelevant to whether that decision amounted to an effective prohibition. Regardless, the court need not resolve the plaintiffs' relevance objection. First, as discussed supra at ¶ D, Maxson's opinions as to the UniceL-Verizon deal are inadmissible for other reasons, and, as discussed infra at ¶ AA, the only other record evidence on that point fails to show any connection between that deal and UniceL's claimed coverage gap. Second, as also already discussed, see n.19, supra, evidence of the plaintiffs' actions in carrying out the settlement with the Town is also inadmissible for an independent reason. Third, as also discussed infra at ¶ AA, because the court finds that placing a tower on Evans Hill--either alone or in conjunction with antennas at the National Grid tower and another new tower at the ABCCC--is not a feasible alternative for reasons independent of the availability of a site there, evidence that Slade was able to acquire such a site is essentially irrelevant anyway.

Effective prohibition

G. The court now turns to the merits of the effective prohibition claim. In relevant part, the TCA provides that "[t]he regulation of the placement, construction, or modification of personal wireless facilities by any State or local government or instrumentality thereof . . . shall not prohibit or have the effect of prohibiting the provision of personal wireless

services.” 47 U.S.C. § 332(c)(7)(B)(i)(II). As the court of appeals has observed, “[b]eyond [this] language, the TCA provides no guidance on what constitutes an effective prohibition, so courts, including this one, have added judicial gloss.”

Omnipoint Holdings, Inc. v. City of Cranston, 586 F.3d 38, 48 (1st Cir. 2009).

H. Where, as here, “a carrier claims an individual denial is an effective prohibition, virtually all circuits require courts to (1) find a ‘significant gap’ in coverage exists in an area and (2) consider whether alternatives to the carrier’s proposed solution to that gap mean that there is no effective prohibition.” Id. (footnote omitted). The court of appeals has instructed that “both of these determinations are fact-bound” and, as a result, not usually resolved by applying “bright-line legal standards.” Id. Indeed, “whether, under the circumstances, an effective prohibition has occurred is a factual issue” to be resolved by the district court. Id. at 47.

I. “The carrier has the burden to show an effective prohibition has occurred.” Id. at 49. As explained infra, the court finds that the plaintiffs have carried that burden here by a preponderance of the evidence.

Significant gap

J. First, the evidence is overwhelming that both Unice1 and U.S. Cellular have significant gaps in their wireless coverage in the areas they seek to serve through the proposed East Side Drive facility. "Through the significant-gap analysis courts determine whether a coverage problem exists at all" by "consider[ing] whether a significant gap in coverage exists within the individual carrier's network"--as opposed to "whether any carrier provides service to an area." Id. at 49-50. "When relevant, courts assessing whether a coverage gap is significant should address, inter alia, the physical size of the gap, the area in which there is a gap, the number of users the gap affects, and whether all of the carrier's users in that area are similarly affected by the gaps." Id.

K. Unice1 and U.S. Cellular both have numerous gaps in coverage in the area of the proposed tower, including portions of several state roads beginning in Alton proper and continuing northward along the eastern side of Alton Bay. See ¶¶ 4-5, supra. U.S. Cellular's gap, in fact, includes nearly all of Route 28A as it traverses the eastern edge of the bay between Routes 11 and 28. See ¶ 5, supra. These gaps could therefore affect the cellphone service of all Unice1 or U.S. Cellular subscribers as they traverse these roads, or visit the center of

Alton proper. Moreover, Hutchins, the independent expert hired by the Town, confirmed that both Unice1 and U.S. Cellular had inadequate coverage in the area of the proposed tower, particularly along Routes 28 and 28A. See id. ¶¶ 26, 45.

L. These facts suffice to establish, by a preponderance of the evidence, that both Unice1 and U.S. Cellular have significant gaps in their wireless coverage in the area of the proposed tower. The Slades did not present any evidence to the contrary. Instead, they argued that, because "Unice1 no longer independently exists and is now part of the Verizon Wireless network," any analysis of Unice1's coverage in the area would have to include Verizon's coverage--and, because there is no record evidence of any Verizon coverage gap, it follows that the plaintiffs have failed to show any Unice1 coverage gap.

M. One problem with this argument is that there is no admissible evidence for its premise.²⁵ Again, the only admissible evidence shows that, after Unice1's parent, Rural Cellular, merged with an entity "ultimately owned" by Verizon, Rural Cellular maintained its corporate existence--though it and its FCC licenses were to be "controlled by Verizon Wireless," which planned to integrate Rural Cellular's networks into

²⁵Another problem is that it relies on events that occurred after the ZBA decision giving rise to the effective prohibition claim. See ¶ E, supra.

Verizon's existing networks over the 18-month period following the August 2008 merger. Id. ¶ 75 & n.23, supra. There is no admissible evidence as to when that integration was completed (if it even had been at the time of trial) so that, as the Slades assert, Unicel "is now part of the Verizon Wireless network."²⁶

N. As just noted, the court of appeals has squarely held that, in deciding an effective prohibition claim, a court must "consider whether a significant gap exists within the individual carrier's network." Omnipoint, 586 F.3d at 49 (emphasis added). Because, based on the admissible evidence of record, Unicel's network remains separate from Verizon's network despite the Rural Cellular-Verizon merger, the fact that Verizon might happen to provide coverage in the area of the proposed East Side Drive facility does not serve to negate Unicel's demonstrated coverage gap or its effective prohibition claim. "The fact that some carrier provides some coverage to some consumers does not in

²⁶The Slades attempted to elicit evidence to this effect by cross-examining Delaney, but he stated that his knowledge of the merger came from reading about it in a trade publication and that, while he understood "that former Unicel subscribers are now Verizon subscribers," he did not "know the particulars." Importantly, he said he did not know whether "former RCC Unicel customers have been converted over to the Verizon Wireless networks." Again, Maxson's proffered opinion testimony as to the effect of the merger is not admissible. Hutchins, for his part, testified that, at the time of his trial deposition in November 2011, Verizon and other carriers generally "ha[d]n't quite decided" how to utilize licenses they acquired by merging with other carriers.

itself mean that the town has not effectively prohibited services to other consumers.” [Second Generation Props., L.P. v. Town of Pelham](#). 313 F.3d 620, 634 (1st Cir. 2002).

O. Furthermore, as the Slades have repeatedly pointed out, there is no evidence as to Verizon’s coverage in the vicinity of the proposed East Side Drive facility or, for that matter, anywhere. It follows that, even if Unicel subscribers have in fact been transferred to the Verizon network post-merger, there is no reason to conclude that they now have adequate service in that area.²⁷

P. The Slades argue that this absence of evidence actually works in their favor, since Unicel bears the burden of demonstrating a significant gap in coverage in order to prevail on its effective prohibition claim. But it hardly seems appropriate to rule that Unicel has failed to carry this burden based on what amounts to speculation about the effect of the Rural Cellular-Verizon merger on those carriers’ coverage in the area--particularly when the existence of a Unicel coverage gap went uncontested by the Town land use authorities throughout the proceedings before them and, so far as the court is aware, in

²⁷To the contrary, Unicel’s continued pursuit of this very litigation strongly suggests that Verizon (which, of course, has controlled Unicel since the merger was consummated in 2008, more than three years before trial) does not have adequate service in that area.

this litigation, up until the week before trial when the Slades raised this issue for the first time. Had they raised this issue in the ordinary course (for example, by filing an answer--as a defendant is normally obligated to do but the Slades, as has been discussed, did not--that denied the plaintiffs' allegation in their complaint of "significant gaps in wireless coverage for both [Unicel] and U.S. Cellular in central and northern Alton"), then the plaintiffs may well have been prepared to prove the existence of a Unicel coverage gap notwithstanding the merger. To accept the Slades' argument, then, would be to reward them for sandbagging the plaintiffs on this point.

Q. In any event, the fact remains that the only admissible evidence of the effect of the merger on the Unicel coverage gap is that, at the time they sought approval of the merger, Verizon and Rural Cellular planned to integrate their networks. The court declines to infer from that fact alone that the integration had already happened before trial such that the relevant network for purposes of the "significant gap" analysis is a joint Verizon-Rural Cellular Network, rather than the Unicel network that existed at the time the ZBA denied the plaintiffs' application to build the East Side Drive tower--a network which, it is undisputed, has significant coverage gaps in that area (as does the U.S. Cellular network).

Alternative solutions

R. "Once a court has found a coverage gap exists, it must determine whether local authorities have prevented a carrier from closing that gap so as to amount to an effective prohibition." [Omnipoint](#), 586 F.3d at 50.

S. In [Omnipoint](#), the court of appeals surveyed the case law's "different articulations" of the test "for the second prong of effective-prohibition claims," including its own statement that the solution rejected by the town amount to the "'only feasible plan,'" [id.](#) (quoting [Town of Amherst v. Omnipoint Commcn's Enters., Inc.](#), 173 F.3d 9, 14 (1st Cir. 1999)), and other courts' holdings that "the proposed solution [be] the least-intrusive means," [id.](#) (citing [T-Mobile USA, Inc. v. City of Anacortes](#), 572 F.3d 987, 995 (9th Cir. 2009) and [Nextel W. Corp. v. Unity Twp.](#), 282 F.3d 257, 266 (3d Cir. 2002)). Observing that "[i]t is unclear how much these different articulations of the tests truly differ," the court went on to explain that "[t]he underlying question is whether, under the facts of a case, a zoning decision effectively prohibited providing wireless service," disclaiming any "general rule" or single "analytic approach." [Id.](#) at 50-51 (quotation marks omitted).

T. [Omnipoint](#) further teaches that "[w]hether the carrier proves an effective prohibition has occurred is a factual

question for the trial court to resolve. As with most such questions, the district court may consider a number of facts relevant to the conclusion What facts are relevant may vary with the case." [Id.](#) at 52 (citation omitted). Noting that "the technical feasibility of the proposed solution or alternative solutions is important," the court cautioned that this factor "is not the only criterion," and proceeded to list a number of others: "the overall cost to the carrier, whether the solution was technically efficient, whether other technically adequate solutions were in evidence, whether the town could prefer other solutions on aesthetic grounds, and whether local authorities were willing to cooperate with carriers." [Id.](#) at 52 (citing [Town of Amherst](#), 173 F.3d at 14-17). "Ultimately the question is a practical inquiry into feasible, available alternatives." [Id.](#) at 52-53.

U. Despite the flexibility of this approach, the [Omnipoint](#) court did identify one essential element of an effective prohibition claim, like the one here, based on the theory that local authorities have disallowed "the only feasible plan" for closing a significant coverage gap: "[t]he burden is on the carrier to prove it investigated thoroughly the possibility of other viable alternatives before concluding no other feasible plan was available." [Id.](#) at 52 (quotation marks omitted). The

plaintiffs acknowledge that they bear this burden here, but argue that they have met it, based on the evidence that they "evaluated dozens of options before ruling them out" as alternatives to the proposed East Side Drive site. The Slades dispute the adequacy of the plaintiffs' investigation, which was one of the key factual issues at trial. A preponderance of the evidence supports the plaintiffs' position on this issue.

V. For both Unice1 and U.S. Cellular, the investigation of potential antenna locations in Alton began in the four "overlay districts" where the Town permitted wireless facilities at the time. See ¶¶ 10, 18, supra. Both determined that none of these districts was a feasible location to close its significant coverage gap in Alton (though Unice1 did decide to place an antenna in one of those districts, on the existing Prospect Mountain tower). See id. Both then began investigating other potential locations--a challenging task in the mountainous and heavily forested terrain surrounding Alton Bay. See ¶ 6, supra.

W. Unice1 identified ten different properties as potential sites (some on the eastern side of the bay and some on the western side of the bay) and made inquiry of their owners. See ¶ 11, supra. Of the four owners who expressed interest in response, only one owned property that Unice1 ultimately found to be feasible. See ¶ 12, supra. U.S. Cellular, for its part,

focused its search on Pine Mountain, about one and one half miles from the bay's western shoreline, identifying six different parcels there. See ¶ 19, supra. But the owners of each of those parcels either rejected or did not respond to U.S. Cellular's offers to use part of it as a tower site--and U.S. Cellular ultimately determined that none of these parcels was a feasible location anyway. See ¶¶ 19-20, supra.

X. The plaintiffs also investigated the two potential alternative sites suggested by Hutchins as part of his evaluation of the plaintiffs' proposal: Evans Hill and the ABCCC property.²⁸ In fact, in response to Hutchins's suggestions, Unice1 and U.S. Cellular both independently evaluated placing a tower on Evans Hill rather than at the East Side Drive site, and concluded that doing so would leave significant gaps in coverage along Routes 11, 28, and 28A. See ¶¶ 32, 40. Even before Hutchins had mentioned the ABCCC site in his June 2006 addendum, Unice1 had investigated two other nearby properties, but determined that placing a tower there would have left significant gaps in coverage. See ¶¶ 13-14, supra. Goulet, whom U.S. Cellular had retained to find an antenna location in Alton,

²⁸The plaintiffs also responded to a different outside engineer's suggestion that they had failed to investigate placing their antennas on existing structures by showing that, even if they placed one on the steeples of each of four different local churches and the Town Hall, coverage gaps would remain--even if a new tower were placed on Evans Hill as well. See ¶ 45, supra.

explained that he did not even consider looking at the ABCCC site during his efforts because its elevation is hundreds of feet lower than tree-lined ridges between the site and the coverage gaps on the other side of the bay and, as a result, would not reach them. See ¶ 16, supra.

Y. Furthermore, as Delaney said he recognized while carrying out Unicef's investigation of potential sites for a wireless tower in Alton, the ABCCC site is infeasible for another, independent reason--its high visibility. See ¶ 14, supra. The site is less than a half a mile uphill from the Mt. Washington Ferry dock, which the chairman of the ZBA himself described during a hearing on the plaintiffs' applications as a spot where "a great number of people come to view this lake and surrounding mountains." See ¶ 15, supra. Of course, the ZBA denied the application for a tower at the East Side Drive site based on its stated concerns over visual impact of that tower from the bay (and the East Side Drive site is located several miles further away from the ferry dock and the bay itself than the ABCCC site is). See ¶ 56, supra.

Z. As the court of appeals explained in Omnipoint, it has held that a carrier failed to meet its burden of proving a thorough investigation of viable alternatives where "the evidence has essentially been undisputed that the carrier had other

alternatives." 586 F.3d at 52. That would be a wildly inapt description of the record in this case. So far as the court can tell, the carriers' conclusions that various alternatives to the proposed East Side Drive site were infeasible have never been seriously challenged, either during the proceedings before the Town boards, or at trial here. Indeed, Hutchins testified before the joint session of the ZBA and Planning Board in November 2006 that he had "looked at a number of other possibilities" but that he and the plaintiffs "were pretty much in agreement that there isn't anything that's jumped out at me that would work as an alternative site." See ¶ 48, supra. The Slades did not proffer any evidence at trial disputing the plaintiffs' conclusions as to the infeasibility of a single alternative site (and that includes even Maxson's inadmissible opinion testimony).²⁹

AA. Instead, the Slades devoted a substantial portion of their trial presentation to trying to show that the plaintiffs could have done more to follow up with the owners of potential

²⁹The Slades rely on a comment in Hutchins's June 2006 addendum that, because U.S. Cellular operates its network at a lower frequency (with better propagation) than UniceL, see ¶ 1, supra, "U.S. Cellular may have more leeway in moving its location, and may have preferred Evans Hill had it been chosen by [UniceL] originally." This comment is self-evidently speculative. In any event, Goulet later explained--both to the ZBA in response to Hutchins's addendum, and in his trial testimony--that even a cellular signal from a tower on Evans Hill would not reach significant gaps along Routes 28 and 28A, so it is clear that U.S. Cellular would not have "preferred" putting its antenna there.

alternative sites (particularly the sites on the top of Evans Hill and at the ABCCC, see nn. 4, 13 and accompanying text, supra). As just discussed, however, there has never been any evidence to suggest that either of those sites is a viable alternative to the East Side Drive location, including Evans Hill and the ABCCC property (indeed, the evidence is undisputed that both of those sites are not viable alternatives). This is hardly a case, then, where the plaintiff's "own experts acknowledge[] that its land [is] not the only location where a tower could provide coverage in the alleged gap," [Second Generation](#), 313 F.3d at 635 (upholding finding of no effective prohibition), or "presented no evidence it investigated alternative solutions other than conclusory statements," [VoiceStream Minneapolis, Inc. v. St. Croix County](#), 342 F.3d 818, 835-36 (7th Cir. 2003) (same).

BB. The Slades also argue that, even if neither Evans Hill nor the ABCCC property could itself serve as a viable alternative to the East Side Drive location, erecting towers at both of those locations, as well as placing a third antenna on the existing National Grid tower, could. The plaintiffs' "fail[ure] to demonstrate that it made a full effort to evaluate" such a "multi-facility network," the Slades argue, dooms the effective prohibition claim here. The court disagrees.

CC. As already noted, the court of appeals has placed the burden on a carrier who brings an effective prohibition claim arising out of a single denial to show that the carrier "investigated thoroughly the possibility of other viable alternatives," not all other conceivable alternatives. [Omnipoint](#), 586 F.3d at 52 (emphasis added). The plaintiffs have shown by a preponderance of the evidence that a multi-tower solution incorporating Evans Hill is not viable. While Hutchins tried to demonstrate in his June 2006 addendum that combining coverage from an antenna at 95 feet at Evans Hill and 145 feet on the existing National Grid tower would be an acceptable alternative, see ¶ 39, supra, he admitted in his testimony at the September 2006 hearing, that this "really wouldn't be a practical solution . . . in theory that might work, but I don't think that it would work really well," see ¶ 48, supra (emphases added). An alternative that is impractical and "in theory . . . might work," especially in the learned estimation of the permitting authority's own radiofrequency engineer, is the conceptual opposite of a "viable alternative." After all, the effective prohibition analysis is a "practical inquiry," not a theoretical exercise. [Omnipoint](#), 586 F.3d at at 52-53.

DD. Furthermore, Goulet testified at trial that, under the solution proposed by Hutchins, gaps remain on Route 28 and 28A

because Miramatchie Hill--the location of the proposed East Side Drive tower--blocks the signals coming from the Evans Hill site to the north and the National Grid site to the south. See ¶ 42, supra. He had told the ZBA as much in response to Hutchins's June 2006 addendum. See ¶ 40, supra. Goulet explained that Hutchins, in arriving at a contrary conclusion in the addendum (which he later appeared to retract at the September 2006 hearing, in any event), had used less accurate modeling and too low a threshold for coverage.³⁰ See ¶ 43, supra. The court credits this testimony by Goulet at trial, and the testimony by Hutchins at the September 2006 hearing, and finds that installing antennas on both a new tower at the Evans Hill location and on the existing National Grid tower was not a viable alternative, so the plaintiffs were not required to investigate it during the application process (particularly when, as just discussed, Hutchins did and ultimately found it not to be viable). The Slades have proffered no evidence to the contrary--including any testimony by Maxson, who did not offer even an improperly disclosed opinion as to combined coverage from Evans Hill and the National Grid tower.

³⁰The court of appeals has held that it is not improper, in evaluating an effective prohibition claim, to accept a provider's standard of reliable service as a measure of coverage. [Omnipoint](#), 586 F.3d at 49. In any event, Hutchins acknowledged that the standard he had used as the minimum level of coverage in preparing his addendum was "becoming unacceptable" at the time.

EE. The court also finds that a solution combining coverage from two new towers--one at Evans Hill and one at the ABCCC site --is not a viable alternative either. There is no admissible evidence to suggest that it would address the significant coverage gap in the area. Hutchins, who had hinted in his addendum at another new tower at the ABCCC site as a way to address the gaps left by moving the tower from East Side Drive to Evans Hill, did not bother to model that solution, and later told the boards, of course, that "there isn't anything that's jumped out at me that would work as an alternative site."³¹ See ¶ 48, supra. It is also significant that, in the report Maxson prepared for the Town in this litigation, he did not discuss an alternative solution incorporating the ABCCC site or, indeed, anything on the western side of the bay. See ¶ 61, supra. The court can hardly fault the plaintiffs for "failing to investigate" a solution that two different experts working for the Town did not themselves see fit to investigate.³²

³¹The court acknowledges that, at his trial deposition, Hutchins said (in apparent reference to the ABCCC property), "I know that I could show the viability of a site there." Hutchins admitted, though, that he was unfamiliar with the topography in that area, so that he would "want to do some modeling" before expressing an opinion as to whether an additional tower at that location would close some of the gaps left by siting the other new tower at Evans Hill rather than East Side Drive.

³²Maxson, of course, did investigate the proposed three-tower solution once the Slades retained him for purposes of this litigation, but his resulting opinion was not properly disclosed

FF. Accordingly, the court finds, by a preponderance of the evidence, that the plaintiffs thoroughly investigated the possibility of viable alternatives before concluding that no other feasible plan was available. [Omnipoint](#), 586 F.3d at 52. Weighing the other facts that bear on the second prong of the effective prohibition analysis, see ¶ T, supra, the court finds that the ZBA's denial of the plaintiffs' applications to construct the proposed tower at the East Side Drive location amounted to an effective prohibition.

GG. First, "the technical feasibility of the proposed solution or solutions is important," see [Omnipoint](#), 586 F.3d at 52, and, here, for largely the reasons just discussed at length, the admissible evidence of record shows that the proposed solution is the only technically feasible one to close the identified coverage gaps.

HH. In a properly disclosed opinion, Maxson stated that "position[ing] three 70-foot poles around the targeted area [would] achieve substantially the same coverage as the proposed tower," but, aside from showing them as points on a map, Maxson did not identify the location of those poles. See ¶ 61, supra.

and is inadmissible. Even if it could be admitted, the court does not find the opinion reliable, essentially for the reasons stated in the plaintiffs' objection to Maxson's trial affidavit and certain other of the Slades' proffered trial evidence (document no. 120) and developed further during his cross-examination at trial.

It is impossible to tell, then, whether those locations are suitable or available for siting wireless facilities or the height of the trees there--which is significant because, as Hutchins advised the Town in his June 2006 addendum, antennas need to be placed at least fifteen feet above the treetops, as a rule. See ¶ 33, supra. Moreover, while Maxson's report included a map projecting the coverage from the three poles, it was never submitted to the court in its original color version, so it is impossible to tell the extent to which the three-pole solution, even in Maxson's opinion, would fill the significant coverage gaps in the area.³³ The court does not find Maxson's proposed three-pole solution to be technically feasible. Cf. Omnipoint, 586 F.3d at 44-45 (upholding district court's rejection of Maxson's proposed alternative to carrier's plan where, among other things, "he did not investigate whether other sites he suggested were available or could even support the infrastructure he was envisioning," "identified only general locations to build facilities," and "performed no testing to show whether these alternative designs actually would cover the gap").

³³The map explains that yellow shows areas of "optimal vehicular" coverage, while green shows areas of "outdoor and some vehicular" coverage. It is worth noting that Maxson's stated signal strength for "outdoor and some vehicular" coverage, -91 dBm, is less than U.S. Cellular's coverage threshold of -85 dBm.

II. Second, the plaintiffs' proposed solution is technically efficient. It is essentially undisputed that a single 120 foot tower at the Evans Hill location would remedy both Unicef's and U.S. Cellular's coverage gaps in that area; as Hutchins told the joint session of the ZBA and Planning Board, "the East Side Drive facility really fills the hole."³⁴ See ¶ 48, supra. As already discussed, it is also undisputed that this would not be accomplished by any other single-tower solution, see ¶ DD, supra, nor by placing antennas on existing structures, see ¶ 45, supra.

JJ. Third, there are no other technically adequate solutions in evidence, as also already discussed. To the contrary, the evidence is that placing one antenna on a new tower on Evans Hill and another on the existing National Grid tower is not an adequate solution, but a "theoretical" one, see ¶¶ CC-DD, supra, while there is simply no admissible proof that this

³⁴Maxson's opinion that "[a] facility at the East Side Drive site does not completely address the [plaintiffs'] coverage objectives in Alton," see ¶ 71, supra, was not timely disclosed and is therefore inadmissible, see ¶ C, supra. While Maxson's report included a map modeling PCS coverage from the proposed site, that map--like the others included in his report--was prepared in color but submitted in black-and-white and is essentially useless. Regardless, even in Maxson's improperly disclosed opinion, the only areas left uncovered by the plaintiffs' proposal would be "sections" of two residential streets (which he shows as almost entirely covered by PCS service on the map submitted with his trial affidavit). See ¶ 71, supra.

inadequacy would be cured by adding a third antenna, on another new tower to be built on the ABCCC site, see ¶¶ EE, supra.

KK. Fourth, even if one of these multi-antenna solutions were technically feasible, it would impose significant additional costs on Unice1 and U.S. Cellular. The evidence was unchallenged that each antenna (and related equipment) costs each carrier approximately \$500,000 and that, in addition, each carrier must pay a separate monthly rental fee for space on each tower. See ¶ 17, supra. Furthermore, each tower costs approximately \$500,000 to build. See id. So, combining the costs to Unice1 and U.S. Cellular, the total additional expense (exclusive of rental payments) of putting antennas at Evans Hill and on the National Grid tower would be about \$1 million, while building another new tower at the ABCCC site and putting antennas there would add \$1.5 million more to the total cost. In other words, the Evans Hill-National Grid-ABCCC solution would cost \$2.5 million more than the East Side Drive solution (and, of course, there is no evidence that it would work to fill the significant coverage gaps at issue).

LL. Fifth, even leaving technical feasibility and cost aside, it seems highly unlikely that the Town of Alton would have preferred either of the proffered multi-tower solutions on aesthetic grounds. It is worth re-emphasizing here that Evans

Hill is higher in elevation, and only slightly further from the eastern shore of Alton Bay, than the East Side Drive site, and that Evans Hill had been designated as a "protected view shed" when the plaintiffs began looking for tower sites in the Town. See ¶ 31, supra. So there is no reason to believe, and the Slades have not pointed to or adduced any evidence to suggest, that the visual impact of a tower at Evans Hill would be appreciably less than the visual impact of a tower at East Side Drive--at least from the bay. See ¶ 51, supra. The claimed visual impact of the proposed East Side Drive tower from the bay, of course, was the principal reason the ZBA gave for denying the plaintiffs' applications. See ¶ 56, supra.

MM. It is inescapably clear that the visual impact of new towers at both Evans Hill and the ABCCC site would far exceed the visual impact of a single new tower at the East Side Drive location. The ABCCC site is "highly visible" and, as the chairman of the planning board himself observed, just thousands of feet from an area where "a great number of people come to view this lake [and] the surrounding mountains." See ¶ 15, supra. Moreover, so far as the court can tell, while Hutchins's June 2006 addendum alluded to placing a tower "up the hill from the Bay in the vicinity of [the ABCCC]," that suggestion was never even mentioned--let alone seriously discussed--at any of the

public hearings on the plaintiffs' applications. There is simply no basis, then, to conclude that the ZBA would have preferred any of the proposed multi-tower alternatives on aesthetic grounds.³⁵

NN. Of course, the Slades would prefer the multi-tower alternatives to having a tower built on the East Side Drive site, which abuts the rear of their vacation property. While, as a result of the ruling by the court of appeals in this case, the Slades are empowered to defend the ZBA's denial of permission for a tower on the site even though the Town has abandoned that defense (again, the Town did not even appear for trial), it does not follow that the Slades can successfully do so by pointing to "alternatives" that were never even considered by the ZBA. Again, these "alternatives" are completely at odds with the principal reason the ZBA gave for rejecting the single tower proposed by the plaintiffs, i.e., its visual impact.

OO. It is undisputed that this impact would be greatly exacerbated by replacing one tower at East Side Drive with two

³⁵The Slades rely heavily on the fact that, at the November 2006 joint hearing, the planning board approved a motion that "[w]e would like to see a study that would illustrate the effectiveness of a network of telecommunications facilities in accordance with our new zoning ordinance with all possible locations to be considered at the expense of the Town of Alton." See ¶ 54, supra. Whatever else can be said of this action, it does not support the inference that the ZBA--which is the board that made the decision at issue here--would have preferred a solution with towers at both Evans Hill and the ABCCC site, particularly in light of the evidence to the contrary.

towers: one at Evans Hill, less than a mile from East Side Drive and at a higher elevation, and the second at the ABCCC, more or less smack dab in the middle of the Town's main tourist destination--and, of course, it is nothing more than a matter of conjecture on the present record that this much costlier solution (again, it would also include installing third new antenna for each carrier on the National Grid tower) would even fill the carriers' significant coverage gaps in the Town.³⁶ Despite these circumstances, the Slades invoke the passage from the decision by the court of appeals in [Town of Amherst](#) that TCA preserves local authority to resolve "trade-offs" between "the opportunity for the carrier to save costs, pay more to the town, and reduce the number of towers" and "more costs, more towers, but possibly less offensive sites and somewhat shorter towers." 173 F.3d at 15. Here, the ABCCC site is more offensive than the East Side Drive site, so that, even if the Evans Hill site is "possibly less offensive," substituting it and the ABCCC site (plus additional antennas on the National Grid Tower) would represent a "trade" in which the Town would impose greater costs on both itself,

³⁶It is worth noting that, even in Maxson's inadmissible opinion, each of the new towers would have to be 90 feet high in order to fill the coverage gaps. The notion that the ZBA would allow a 90-foot tower on a 700-foot hill just thousands of feet from the Mount Washington ferry dock--and another 90-foot tower on a prominent hill overlooking the bay which had itself been designated a "protected view shed"--is highly implausible.

aesthetically, and the carriers, financially (and operationally as well, so far as the admissible evidence shows).

PP. The notion that this is a "feasible alternative," and that the plaintiffs should lose their effective prohibition claim for failing to "investigate" it, borders on fanciful. The Slades' contrary suggestion exposes their defense of this case--a defense they showed not the slightest interest in conducting until nearly three years after the litigation had been commenced, and after it had been settled between the plaintiffs and the Town--as a troubling manifestation of precisely the "not in my backyard" mentality that, according to the court of appeals, the TCA exists in part to overcome. See [Omnipoint](#), 586 F.3d at 51 n.6. There is simply no basis whatsoever to conclude that placing new 90-foot towers at both Evans Hill and the ABCCC site, plus new antennas at the National Grid site, would have been preferable to anybody but the Slades.

QQ. There is evidence that the ZBA would have preferred a shorter tower at the East Side Drive location than the 120-foot structure proposed by the plaintiffs. But it is at best unclear from the record how much lowering the tower would have mitigated its effect on views, from the bay or otherwise: after observing the balloon test, the chairman of the planning board reported that even a 75-foot tower at the East Side Drive site would be

"plainly visible from many locations," and there was testimony at trial that shortening the tower by 20 feet would have made no real difference to its visual impact. See ¶ 51, supra.

RR. But a preponderance of the evidence shows that shortening the tower would have made it infeasible from a technical standpoint. While Hutchins had originally relied solely on information as to the "average tree canopy" at the East Side Drive site to arrive at a minimum antenna height of 75 feet, as stated in the June 2006 addendum, see ¶ 34, supra, he later testified at the hearing that, based on information he had since received as to a number of tall trees at the site that could serve to interfere with signals from the antennas, the minimum antenna height "probably needs to be somewhere in the 90-95-foot range," see ¶ 47, supra. This was consistent with what both Goulet and Kozyra told the ZBA, i.e., that the lowest workable antenna height at the East Side Drive location was between 90 and 100 feet. See ¶¶ 40, 55, supra.

SS. It follows from this conclusion, as Hutchins further explained at the hearing, that the tower would have to be approximately 120 feet tall--as the plaintiffs had proposed--in order to accommodate (1) the microwave dish linking the tower to others nearby to allow the network to function, (2) an antenna for each of Unice1 and U.S. Cellular, (3) the required 10 feet of

spacing between each of these devices, and (4) an additional five feet at the top of the tower to prevent an unsightly protrusion of the upper antenna. See ¶ 47, supra.

TT. The Slades have not come forward with any admissible evidence to contradict Hutchins's opinion as to the necessity for a 120-foot tower,³⁷ nor any reasoned argument as to why the court should instead credit his earlier statement, in the June 2006 addendum, that a minimum acceptable antenna height at the East Side Drive site was 75 feet. Rather, the Slades argue that a shorter tower was feasible on the theory that the plaintiffs could simply cut the portions of the tall trees at the site that would interfere with signals from the tower.

UU. As an initial matter, there is no admissible evidence that a tower of any less than 100 feet would be feasible, even if the plaintiffs were to remove the offending trees. As Hutchins

³⁷In his report on behalf of the Town, Maxson stated that his "analysis of the 71-foot height and the 120-foot height at the site reveal [sic] little difference in local coverage." Again, though, this conclusion is based on coverage maps that were prepared in color but submitted only in black-and-white. Furthermore, this court finds Hutchins's opinion more credible, based on (a) his superior training and experience, (b) the fact that he rendered it while working as an independent engineer for the ZBA in analyzing the applications, rather than solely in the context of litigation, and (c) its consistency with the opinions that both Goulet and Kozyra gave to the ZBA. Insofar as Hutchins retreated from his conclusion in his trial deposition--which is difficult to tell in light of the non-responsive and meandering nature of his answers to many of the questions--the court nevertheless credits his testimony at the ZBA hearing.

recognized in the June 2006 addendum, the antennas would still need to clear the rest of the surrounding canopy by at least 15 feet, resulting in a minimum antenna height of 75 feet.³⁸

See ¶ 34, supra. This, in turn, would have resulted in a tower of 100 feet: the microwave dish antenna would have been placed at the minimum height and each of the two carriers' antennas would have been placed above it at ten foot intervals (and five feet would have been added to the top, as is customary for aesthetic reasons). See ¶ 47, supra.

VV. In response, the Slades argue that, because the plaintiffs have no "right" under the TCA to install the microwave dish, it should be disregarded in figuring the minimum feasible height of the tower. Hutchins, however, did not think so. As he recognized in his June 2006 addendum, different towers in the same network have to link to each other, and, to accomplish this, microwave "dish-type antennas are typically utilized" as opposed to "difficult and expensive" land-line connections, see ¶ 37, supra, which, as he elaborated at his trial deposition, are also susceptible to failure in storms. The Slades have adduced no admissible evidence to call this analysis into serious

³⁸This assumes, of course, that the forester's calculation of the average tree canopy height at the site as 61 feet was correct. But see nn. 7-8 and accompanying text, supra. Unicel's engineer had calculated the average tree canopy height at the site as 84 feet, see ¶ 34, supra, which would make the minimum antenna height nearly 100 feet.

question.³⁹ Like Hutchins, then, the court will not disregard the microwave dish antenna in determining the minimum feasible height of the tower.

WW. In any event, the record suggests that cutting the tall trees near the tower that would have interfered with its signals was not a feasible option, because the Town's wireless facilities ordinance expressly prohibits the removal or "topping" of trees within a 150-foot radius of such a facility. See ¶ 29, supra. It is true, as the Slades point out, that the plaintiffs could have attempted to get a variance from this requirement (in addition to the variance from the height limitation they needed for a tower exceeding 81 feet), and the fact that town by-laws "require[] prior permission case by case" to construct a wireless facility does not itself equal an effective prohibition. Town of Amherst, 173 F.3d at 14. To prevent the trees at the site from interfering with the signal from a lower antenna, however, the plaintiffs would have to chop down every tree within 150 feet (and, in some cases, as much as 600 feet) of the tower, see ¶ 44, supra, and it is reasonable to conclude that a ZBA preoccupied

³⁹The Slades also point out that U.S. Cellular did not plan to install a microwave dish on tower--but, of course, Unicel did. While the 100-foot tower proposed by the plaintiffs as part of the settlement of their claims against the Town would not have included a microwave dish, that evidence is not admissible as to the merits of the effective prohibition claim, as already noted. See n.19, supra.

with the visual impact of the tower would not agree to such measures--particularly when the ordinance also requires that the "facility's effect has been minimized on the viewshed containing the facility." Indeed, while cutting the trees that would interfere with signals from the tower seems like an obvious solution (as one member of the public who spoke at one of the hearings pointed out, "there's a thing called a chainsaw"), there is no evidence that anyone from either the ZBA or the planning board embraced it.

XX. The Slades' response, predictably, is to fault the plaintiffs for not proposing such a solution--and the shorter tower that it would facilitate--in order to accommodate the board's stated concern over the visual impact of the 120-foot height. Leaving aside the fact that, as just discussed, clear-cutting the area around the tower would have increased its visual impact (at least from areas closer to it), the effective prohibition standard envisions the permitting process as a two-way street, and accounts for "whether local authorities were willing to cooperate with carriers" as well as the level of the carriers' cooperation with the Town. [Omnipoint](#), 586 F.3d at 52.

YY. Here, contrary to the Slades' suggestion, the plaintiffs stated at the October 2006 hearing that they were "willing to work with" the boards to make the tower "at least as

intrusive as we can . . . as long as it makes some economic sense and operational sense.” See ¶ 52, supra. Indeed, the chairman of the planning board observed--at the hearing just before that board made its unanimous findings adverse to the plaintiffs’ applications--that, at that point, “the applicant hasn’t refused to do anything . . . They haven’t said, no, we’re not going to do 95 feet or whatever the height may be.” See ¶ 49, supra. Nevertheless, aside from a last-minute inquiry from one member of the ZBA about lowering the tower to 90 feet (i.e., just 6 feet above what U.S. Cellular calculated as the average tree canopy height), see ¶ 55, supra, neither of the boards expressed any willingness to consider a tower exceeding the “average tree canopy” by more than 20 feet. At that height, it is undisputed, at least one of the antennas would not have adequately cleared the trees (not even accounting for the microwave dish).

ZZ. Furthermore, as Hutchins explained, the provision of the ordinance limiting the height of a wireless tower to 10 feet above the average tree canopy is an arbitrary standard, see ¶ 35, supra, and, indeed, violates the “rule of thumb” that an antenna should be at least 15 feet above clutter, see ¶ 33, supra. The Town adopted this standard in its revised ordinance, moreover, without meaningfully engaging Unicel, even though its original application for the East Side Drive tower had been pending for

more than six months at the time of the first public hearing on the revision. See ¶ 27, supra. As a result of this change to the rules in the middle of the game, of course, action on Unicel's application was delayed as, among other things, Hutchins had to amend his report to reflect the change.

AAA. These circumstances (as well as several other largely unexplained delays in action on the plaintiffs' application) reflect, on the whole, the boards' lack of cooperation with the plaintiffs. In light of their thorough investigation of alternative sites, and their acknowledged willingness to mitigate the visual impact of the tower, the fact that the plaintiffs did not engage in the sort of unilateral negotiation envisioned by the Slades--proposing a series of lower and lower heights until the boards finally agreed to one--is not fatal to their effective prohibition claim.

BBB. Again, where the court of appeals has rejected effective prohibition claims, "the evidence has been essentially undisputed that the carrier had other alternatives," Omnipoint, 586 F.3d at 52, and that is simply not the case here. To the contrary, there is no evidence of a feasible alternative location, or even a series of locations, and the evidence of a feasible alternative height piles contingency upon contingency: if the average tree canopy height at the East Side Drive site is

61 feet rather than 84 feet, and if the ZBA were to grant the plaintiffs a variance to cut the tall trees at the site that would interfere with the signal rather than enforcing the wireless ordinance as written, and if the tower can reasonably be linked to others in the network using a land line rather than a microwave dish, then a tower of less than 120 feet would be a feasible alternative. The exceedingly slim possibility that all of these conditions are true does not prevent the plaintiffs from proving their effective prohibition claim by a preponderance of the evidence. This conclusion is particularly apt where, again, the tower would have remained "plainly visible from many locations" even had it been lowered all the way to 75 feet--so that there would be little to gain aesthetically by imposing the operational costs of a shorter tower.

CCC. For the foregoing reasons, the court finds, by a preponderance of the evidence, that the ZBA's decision to deny the plaintiffs the variance necessary to build the proposed 120-foot wireless tower at the East Side Drive site had the effect of prohibiting the provision of wireless services in violation of the TCA. See 47 U.S.C. § 332(c)(7)(B)(i)(II).

Remedy

DDD. A finding that a local permitting authority has rejected a wireless facility in violation of the TCA's effective prohibition provision justifies the issuance of an injunction ordering the authority to grant the zoning relief necessary to construct the facility. [Nat'l Tower, LLC v. Plainville Zoning Bd. of Appeals](#), 297 F.3d 14, 25 (1st Cir. 2002). In the joint motion for an expedited hearing on the plaintiffs' summary judgment motion, the plaintiffs and the Town agreed that an appropriate remedy would be an order directing the Town to "permit construction of a 100-foot telecommunications tower" (the height they agreed to, of course, in their settlement of this action) and the Slades agreed at the subsequent telephonic hearing on that motion that "should [the plaintiffs] prevail on [their] effective prohibition claim . . . this court would have the discretion to find that a 100-foot tower is an appropriate remedy." [Indus. Commc'ns](#), 2011 WL 2938368, at *2.

EEE. Exercising that acknowledged discretion, the court will issue a permanent injunction (to be entered as a separate order) requiring the Town to issue all variances, permits, and other approvals necessary to construct the proposed 100-foot wireless tower at 486 East Side Drive, Alton, New Hampshire, as set forth

in the plans referenced in paragraph 14(b) of the joint motion for expedited hearing (document no. [90](#)).⁴⁰

ORDER FOR JUDGMENT

In accordance with the foregoing findings of fact and rulings of law, the court enters judgment for the plaintiffs on their effective prohibition claim (count 2 of their complaint). The plaintiffs' substantial evidence claim (count 1 of their complaint) is dismissed as moot. The clerk shall enter judgment accordingly and close the case.

SO ORDERED.



Joseph N. Laplante
United States District Judge

Dated: September 21, 2012

cc: Steven E. Grill, Esq.
Katherine Blackall Miller, Esq.
Robert D. Ciancella, Esq.
Robert M. Derosier, Esq.
Christopher Cole, Esq.
Karyl Roberts Martin, Esq.

⁴⁰The plaintiffs also request that the court enjoin the Slades from "taking any action, including without limitation any further legal challenges in this court or in any other forum, which would hinder, delay, or interfere with the ability of [the plaintiffs] to proceed with the construction of the proposed facilities." The court declines to pre-emptively issue such an order, which could potentially run afoul of the Anti-Injunction Act. See [Indus. Tower & Wireless, Inc. v. Burley](#), 2010 DNH 180, 6-9. This request is therefore denied without prejudice to reinstatement by the plaintiffs as a motion to enforce the injunction, if necessary.